- 59 -

ABSTRACT

Disclosed is a rotating electric machine capable of leveling the axial temperature rise distribution in the machine by supplying a coolant sufficiently cooled to a central portion in the axial direction of an iron core which is most distant from each of the axial ends of the iron core. A plurality of ventilating passages 18, which continuously extend in the peripheral direction, are provided in the axial direction between a stator frame 1 and a stator iron core 2, and coolers 28 are provided in the ventilating passages 18. A coolant boosted by a booster is cooled by the coolers 28 and is allowed to flow to a central portion in the axial direction of the stator iron core 2 in the direction from the outer peripheral side to the inner peripheral side of the stator iron core 2 via ventilating passages 15, communicated to the central portion in the axial direction of the stator iron core 2, of the ventilating passages 18.